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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,332	12/20/2001	John Boakes	367.40946X00	2546
20457	7590	10/16/2006	EXAMINER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-3873			LUEBKE, RENEE S	
			ART UNIT	PAPER NUMBER
			2833	

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/022,332	BOAKES & VAITKEVICIUS
	<b>Examiner</b> Renee S. Luebke	<b>Art Unit</b> 2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-31 and 33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-31 and 33 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 20 December 2001 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/01 & 2/04.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

1. Applicant has been advised that the Notice of Allowance, mailed March 29, 2004, was vacated. Since the issue fee had already been paid, applicant may request a refund or request that the fee be credited to a deposit account. However, applicant may wait until the application is either found allowable or held abandoned. If allowed, upon receipt of a new Notice of Allowance, applicant may request that the previously submitted issue fee be applied. If abandoned, applicant may request refund or credit to a specified Deposit Account.

Based on consideration of the Chinese reference cited in the IDS of February 26, 2004 (and other issues), prosecution on the merits of this application has been reopened; claims 1-31 and 33 are considered unpatentable for the reasons indicated below.

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:  
The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
3. Claims 1-31 and 33 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain new subject matter which was not described in the original specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. In particular, although the specification describes (page 9, lines 26-29) a contact that is deformed and collapsed, it does not suggest "an inside surface of said contact . . . in substantially direct contact with the surface of said rigid substrate" as required by claims 1 and 17. The specification, as originally filed, does not suggest to any person skilled in the art to make this assumption and form the invention commensurate in scope with the claims.

Applicant is required to cancel the new matter in the reply to this Office Action.

4. Claims 7 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The requirement that the PCB be flexible is contradictory to the requirement of claims 1 and 17 (from which these claims respectively depend) that the substrate, which comprises the PCB, be rigid. Although the application discloses a preferred embodiment (Fig. 4) having the contact on a flexible PCB substrate, claims 1 and 17 now require the contact to be directly on a rigid substrate (Fig. 5). There is no disclosure (or arrangement imagined by the examiner) that would encompass the rigid substrate of claims 1 and 17 and the flexible PCB of claims 7 and 23.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2, 4, 6, 8, 9, 11, 17, 18, 20, 22, 24 and 27, absent the new matter discussed in paragraph 3 above, are rejected under 35 U.S.C. 102(b) as being anticipated by WO 98/41946 (which corresponds to the Chinese document cited by applicant). This device comprises a card 1, a rigid substrate 10 and convex contacts 2 supported by the substrate. An area (suggested by

reference numeral 4) between the contact and the substrate is empty and permits movement as seen by comparing Figs. 5 and 6. Lacking further claim limitations, the position shown in Fig. 6 defines a “fully collapsed deformed state.”

In regard to claims 4 and 20, and as noted by the Chinese examiner, the disclosure further indicates that the contact is metal.

In regard to claims 6, 8, 22 and 24, as seen in Fig. 3, the traces and contacts 8, 9 show the substrate to be a printed circuit board with a conductive track.

In regard to claims 9 and 17, and as noted by the Chinese examiner, the disclosure further indicates that the retaining means is disclosed. In addition, the friction of the contacts is seen to be a retaining means as required by these claims.

7. Claims 3 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/41946 in view of the Research Disclosure cited by applicant. The Research Document teaches a dome as an alternative to an arch when used as a contact. Where two known alternatives are interchangeable for their desired function, an express suggestion of the desirability of the substitution of one for the other is not needed to render such substitution obvious. See In re Fout, 675 F.2d 297, 301, 213 USPQ 532, 536 (CCPA 1982); In re Siebentritt, 372 F.2d 566, 568, 152 USPQ 618, 619 (CCPA 1967). In this case, the Research Document establishes that both an arch and a dome were known alternatives. Also, one skilled in this art would readily appreciate that the circular edge of the dome improves stability of the contact. Therefore, switching the arch of WO 98/41946 for a dome is seen to have been an obvious alternative.

8. Claims 5, 10, 21 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/41946.

In regard to claims 5 and 21, the use of a treated insulator in place of a metal contact is well known. Such an arrangement is used to reduce the weight of the device, set a particular spring constant, improve lifespan, etc. For any of the same reasons, it would have been obvious to use a treated insulator as a conductor in the device of WO 98/41946.

In regard to claims 10 and 26, WO 98/41946 discloses the invention substantially as claimed, but does not disclose using solder to secure the contacts on the substrate. The use of solder to mechanically and electrically connect two elements is well known in the art. It would have been obvious to use solder to secure the contacts on the substrate for better mechanical and electrical connection.

9. Claims 12, 13, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/41946 in view of Reichardt. The card connector of Reichardt comprises a substrate 11 with opposing surfaces on, top part 12 and bottom part 13, supporting contacts in order for the device to hold two cards 27, 28. This arrangement minimizes the space needed (column 1, lines 20-22), and offers more options for the user of the device. For this reason, it would have been obvious to arrange the contacts of WO 98/41946 to hold two cards in the manner taught by Reichardt.

10. Claims 14-16, 25, 30, 31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/41946 in view of applicant's admitted prior art shown in Figs. 1 and 2 of the present application. WO 98/41946 discloses the invention substantially as claimed but does not disclose the particular use of the connector or a sliding catch.

In regard to claims 14-16, 30, 31 and 33 the disclosed prior art teaches the use of similar connectors and a SIM smart card for a portable telephone and applicant discloses that this is a well known use of smart cards. Therefore, it would have been obvious to use the smart card and connector of WO 98/41946 in its well known environment and, as taught by the disclosed prior art, place the connector in a portable telephone for reading SIM smart cards.

In regard to claim 25, the disclosed prior art teaches the use of a sliding catch to secure a smart card in place. It would have been obvious to modify the connector in WO 98/41946 as taught by the disclosed prior art, and to include a sliding catch to enable the connector to be secured in the intended apparatus.

11. The drawings are objected to because Fig. 1 is not clearly drawn and Fig. 2a is too black. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application.

Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

12. The declaration, filed March 15, 2002, is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02. The declaration is defective because it does not identify the country of residence of inventor Boakes. The residence information may be provided on either an application data sheet or supplemental oath or declaration.

13. Any response to this action may be mailed to:

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

or faxed to:

(571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mrs. Renee Luebke at (571) 272-2009. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mrs. Paula Bradley, can be reached at (571) 272-2800, extension 33.



Renee S. Luebke  
Primary Patent Examiner  
October 10, 2006